

Roll No.

Question Booklet Number

O. M. R. Serial No.

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Question Booklet Number

M. Sc. (Second Semester)
(NEP) EXAMINATION, 2025-26
STATISTICS

(Demography) (Elective)

Paper Code							
B	0	6	0	8	0	5	T

Questions Booklet Series
B

Time : 1:30 Hours]

[Maximum Marks : 75

Instructions to the Examinee :

1. Do not open the booklet unless you are asked to do so.
2. The booklet contains 100 questions. Examinee is required to answer 75 questions in the OMR Answer-Sheet provided and not in the question booklet. All questions carry equal marks.
3. Examine the Booklet and the OMR Answer-Sheet very carefully before you proceed. Faulty question booklet due to missing or duplicate pages/questions or having any other discrepancy should be got immediately replaced.

परीक्षार्थियों के लिए निर्देश :

1. प्रश्न-पुस्तिका को तब तक न खोलें जब तक आपसे कहा न जाए।
2. प्रश्न-पुस्तिका में 100 प्रश्न हैं। परीक्षार्थी को 75 प्रश्नों को केवल दी गई OMR आन्सर-शीट पर ही हल करना है, प्रश्न-पुस्तिका पर नहीं। सभी प्रश्नों के अंक समान हैं।
3. प्रश्नों के उत्तर अंकित करने से पूर्व प्रश्न-पुस्तिका तथा OMR आन्सर-शीट को सावधानीपूर्वक देख लें। दोषपूर्ण प्रश्न-पुस्तिका जिसमें कुछ भाग छपने से छूट गए हों या प्रश्न एक से अधिक बार छप गए हों या उसमें किसी अन्य प्रकार की कमी हो, तो उसे तुरन्त बदल लें।

(Remaining instructions on the last page)

(शेष निर्देश अन्तिम पृष्ठ पर)

(Only for Rough Work)

1. One commonly used method of population projection is :
 - (A) Ratio method
 - (B) Curve fitting method
 - (C) Random sampling method
 - (D) Cluster sampling method
2. A stable population is one in which :
 - (A) Age structure and growth rate remain constant over time
 - (B) Birth rate is zero
 - (C) Death rate is zero
 - (D) Migration is zero
3. A life table consists of :
 - (A) Seven columns
 - (B) Eight columns
 - (C) Nine columns
 - (D) None of the above
4. A quasi-stable population is one where :
 - (A) Fertility and mortality rates change gradually over time
 - (B) Population remains constant
 - (C) Death rate is zero
 - (D) Birth rate is zero
5. Demographic parameters are important for :
 - (A) Planning health, education, and economic policies
 - (B) Measuring rainfall
 - (C) Agricultural soil analysis
 - (D) Industrial machinery design
6. Nuptiality in demography refers to the study of :
 - (A) Marriage patterns in a population
 - (B) Birth patterns
 - (C) Migration patterns
 - (D) Occupational patterns
7. The study of nuptiality includes analysis of :
 - (A) Fertility and mortality only
 - (B) Marriage, divorce, widowhood and remarriage
 - (C) Agricultural productivity
 - (D) Population density
8. In the Indian context, nuptiality patterns are largely influenced by
 - (A) Climatic conditions
 - (B) Economic development
 - (C) Cultural and social traditions
 - (D) Industrialization

9. The most common measure of nuptiality is :
- (A) General fertility rate
 - (B) Net reproduction rate
 - (C) Infant mortality rate
 - (D) Crude marriage rate
10. Crude Marriage Rate (CMR) is defined as :
- (A) Number of marriages per 1000 population in a year
 - (B) Number of marriages per 100 births
 - (C) Number of marriages per 100 households
 - (D) Number of marriages per 100 women
11. Age-Specific Marriage Rate (ASMR) measures :
- (A) Marriages among rural population
 - (B) Marriages among specific age groups
 - (C) Marriages per household
 - (D) Marriages per village
12. Singulate Mean Age at Marriage (SMAM) indicates :
- (A) Minimum age at marriage
 - (B) Age at remarriage
 - (C) Average age at first marriage among those who marry
 - (D) Age at divorce
13. Natural fertility refers to :
- (A) Fertility influenced by migration
 - (B) Fertility in rural areas only
 - (C) Fertility under medical treatment
 - (D) Fertility without deliberate birth control
14. Fertility in demography refers to :
- (A) Actual number of live births in a population
 - (B) Biological capacity to reproduce
 - (C) Number of marriages
 - (D) Number of deaths
15. Fecundity refers to :
- (A) Number of children surviving
 - (B) Biological capacity to reproduce
 - (C) Number of births per year
 - (D) Age at marriage
16. Fecundability is defined as :
- (A) Probability of marriage
 - (B) Probability of birth in a population
 - (C) Probability of conception in a menstrual cycle
 - (D) Probability of death in a year

17. One difference between fertility and fecundity is that :
- (A) Fertility is biological ability
 - (B) Both terms are identical
 - (C) Fecundity measures actual births
 - (D) Fertility measures actual births while fecundity measures biological potential
18. General Fertility Rate (GFR) is defined as :
- (A) Births per total population
 - (B) Births per 1000 women aged 15-49
 - (C) Births per household
 - (D) Births per village
19. Age-Specific Fertility Rate (ASFR) measures :
- (A) Births per household
 - (B) Births per family
 - (C) Births to women of specific age groups
 - (D) Births per village
20. Total Fertility Rate (TFR) represents :
- (A) Number of births in a year
 - (B) Total births in a family
 - (C) Number of births in a district
 - (D) Average number of children a woman would bear during reproductive period
21. Gross Reproduction Rate (GRR) measures :
- (A) Average number of daughters a woman would bear
 - (B) Number of male births
 - (C) Total births in population
 - (D) Number of surviving children
22. Net Reproduction Rate (NRR) measures :
- (A) Total number of births
 - (B) Average number of daughters surviving to reproductive age
 - (C) Number of male births
 - (D) Population density
23. When Net Reproduction Rate (NRR) equals 1, it indicates :
- (A) Population decline
 - (B) Population explosion
 - (C) Replacement level fertility
 - (D) Zero fertility
24. Cohort fertility refers to fertility measured for :
- (A) Women in rural areas
 - (B) Married women only
 - (C) Women of different ages in one year
 - (D) A group of women born in the same period

25. Period fertility refers to fertility measured :
- (A) During a specific time period
 - (B) For one family
 - (C) For rural population only
 - (D) For working women
26. Cohort fertility analysis is useful for studying :
- (A) Current fertility trends
 - (B) Completed fertility of women
 - (C) Migration patterns
 - (D) Mortality patterns
27. Period fertility measures are useful for analyzing :
- (A) Long-term fertility of cohorts
 - (B) Family size distribution
 - (C) Current fertility trends
 - (D) Migration trends
28. One important source of fertility data in India is :
- (A) Agricultural census
 - (B) Industrial survey
 - (C) Economic census
 - (D) Population census
29. Urbanization refers to :
- (A) Increase in rural population
 - (B) Increase in population living in urban areas
 - (C) Decline in birth rate
 - (D) Increase in agricultural land
30. One major characteristic of world urbanization in recent decades is :
- (A) Decline in city population
 - (B) Rapid growth of rural areas
 - (C) Rapid growth of urban population in developing countries
 - (D) Decrease in migration
31. The country with one of the highest levels of urbanization is :
- (A) India
 - (B) Nepal
 - (C) Ethiopia
 - (D) United States
32. Urbanization in India has increased mainly after :
- (A) Independence and industrialization
 - (B) Agricultural revolution only
 - (C) Climate change
 - (D) Decline in trade
33. According to the Census of India, a place is classified as urban if it has :
- (A) Population above 5000, density above 400 persons per sq. km, and 75% workers in non-agricultural activities
 - (B) Population above 2000 only
 - (C) Only industrial employment
 - (D) Population above 1000

34. One major cause of urban growth is :
- (A) Decrease in fertility
 - (B) Migration from rural to urban areas
 - (C) Decline in education
 - (D) Decrease in employment
35. Natural increase contributing to urban growth refers to :
- (A) Births minus deaths in urban areas
 - (B) Migration to cities
 - (C) Increase in industries
 - (D) Urban planning
36. Expansion of urban boundaries to include surrounding areas is called :
- (A) Rural growth
 - (B) Natural growth
 - (C) Reclassification of urban areas
 - (D) Agricultural expansion
37. A mega city is usually defined as a city with population exceeding :
- (A) 1 million
 - (B) 5 million
 - (C) 8 million
 - (D) 10 million
38. One example of a mega city in India is :
- (A) Jaipur
 - (B) Mumbai
 - (C) Lucknow
 - (D) Patna
39. Rapid urbanization often leads to :
- (A) Decrease in slums
 - (B) Decrease in pollution
 - (C) Pressure on housing and infrastructure
 - (D) Decline in employment
40. The term migration refers to :
- (A) Temporary travel for tourism
 - (B) Permanent or semi-permanent change of residence
 - (C) Daily commuting
 - (D) Seasonal rainfall
41. Migration occurring within the same country is called :
- (A) International migration
 - (B) Internal migration
 - (C) External migration
 - (D) Global migration

42. Migration caused by employment opportunities is known as :
- (A) Economic migration
 - (B) Political migration
 - (C) Cultural migration
 - (D) Religious migration
43. Forced migration may occur due to :
- (A) Tourism
 - (B) Education
 - (C) War or natural disasters
 - (D) Job promotion
44. Seasonal migration is commonly associated with :
- (A) Industrial workers
 - (B) Agricultural labourers
 - (C) Government employees
 - (D) Business executives
45. Demographic diversity refers to differences in :
- (A) Climate and soil
 - (B) Population characteristics such as age, sex, and ethnicity
 - (C) Agricultural production
 - (D) Industrial output
46. Age structure is an important component of :
- (A) Economic diversity
 - (B) Environmental diversity
 - (C) Demographic diversity
 - (D) Cultural diversity
47. Sex ratio is defined as :
- (A) Number of females per 1000 males
 - (B) Number of males per 100 females
 - (C) Number of females per 100 males
 - (D) Number of males per 1000 females
48. One important source of migration data in India is :
- (A) Geological survey
 - (B) Population census
 - (C) Industrial census
 - (D) Agricultural census
49. Push factors in migration include :
- (A) Better job opportunities
 - (B) Better education
 - (C) Lack of employment in origin area
 - (D) Better health facilities
50. Pull factors in migration include :
- (A) Poverty
 - (B) Natural disasters
 - (C) Unemployment
 - (D) Better job opportunities in destination area

51. The main objective of a Population Census is to :
- (A) Collect data from a selected sample of households
 - (B) Obtain complete demographic information of the entire population at a specific time
 - (C) Estimate fertility rates only
 - (D) Study agricultural production
52. The Civil Registration System (CRS) primarily records :
- (A) Migration statistics
 - (B) Births and deaths
 - (C) Employment and unemployment
 - (D) Income and expenditure
53. To improve upon the registration of vital statistics in India, the central government appointed a committee in 1948 known as :
- (A) Bhor Committee
 - (B) Rath Committee
 - (C) Arthur Committee
 - (D) None of the above
54. A major limitation of census data is :
- (A) It covers only rural areas
 - (B) It cannot be used for population projections
 - (C) It does not include demographic variables
 - (D) It is conducted at long intervals (usually 10 years)
55. The National Sample Survey (NSS) mainly collects :
- (A) Continuous vital statistics
 - (B) Socio-economic data using sampling techniques
 - (C) Data on births and deaths only
 - (D) Data for the census
56. Which of the following is a major limitation of the registration system ?
- (A) Under-registration of vital events
 - (B) It does not record births
 - (C) It collects too much data
 - (D) It is conducted only once in ten years
57. Surveys such as NFHS are mainly used to study :
- (A) Agricultural output
 - (B) Fertility, mortality, and health indicators
 - (C) Industrial growth
 - (D) Transportation networks
58. One advantage of sample surveys like NSS is :
- (A) They eliminate all types of errors
 - (B) They require very large funds
 - (C) They provide detailed information at lower cost and time
 - (D) They cover the entire population

59. The reliability of vital statistics from registration systems depends mainly on :
- (A) Literacy rate of the country
 - (B) Population density
 - (C) Completeness of registration of events
 - (D) Number of enumerators
60. Which of the following sources provides continuous demographic data ?
- (A) Population Census
 - (B) Economic Survey
 - (C) Agricultural Census
 - (D) Civil Registration System
61. The Registration of Births and Deaths Act in India came into force in :
- (A) 1951
 - (B) 1961
 - (C) 1969
 - (D) 1976
62. The authority responsible for implementation of CRS at the national level is :
- (A) Ministry of Finance
 - (B) National Statistical Office
 - (C) Planning Commission
 - (D) Registrar General of India
63. The Sample Registration System (SRS) was introduced mainly to overcome the deficiency of :
- (A) Census enumeration
 - (B) Incomplete registration in CRS
 - (C) Migration statistics
 - (D) Household surveys
64. The SRS technique is based on :
- (A) Postal survey method
 - (B) Administrative reporting
 - (C) Dual record system with matching
 - (D) Telephone interviews
65. In the SRS, an independent retrospective survey is conducted by :
- (A) Village registrar
 - (B) Health department
 - (C) Census enumerator
 - (D) Part-time supervisor
66. Which indicator is most reliably estimated annually by SRS ?
- (A) Crude Birth Rate
 - (B) Literacy Rate
 - (C) Labour Force Participation
 - (D) Agricultural Productivity
67. The main limitation of SRS estimates is :
- (A) Absence of fertility data
 - (B) Sampling variability
 - (C) No mortality estimates
 - (D) Overestimation of population size
68. NSS surveys generally follow which sampling design ?
- (A) Simple random sampling
 - (B) Systematic sampling
 - (C) Multi-stage stratified sampling
 - (D) Cluster census

69. The National Family Health Survey (NFHS) is designed mainly to provide data on :
- (A) National income
 - (B) Health and family welfare indicators
 - (C) Industrial growth
 - (D) Agricultural production
70. NFHS surveys in India are conducted under the guidance of :
- (A) Ministry of Education
 - (B) National Statistical Office
 - (C) Ministry of Health and Family Welfare
 - (D) Ministry of Labour
71. Which of the following indicators is extensively measured in NFHS ?
- (A) Trade balance
 - (B) Industrial output
 - (C) Crop yield
 - (D) Child nutrition status
72. A common limitation of NFHS data is :
- (A) Recall bias in retrospective reporting
 - (B) Absence of demographic indicators
 - (C) Continuous enumeration error
 - (D) Legal registration issues
73. The District Level Household Survey (DLHS) was designed mainly to estimate :
- (A) Agricultural productivity
 - (B) District-level reproductive health indicators
 - (C) Industrial statistics
 - (D) Trade statistics
74. DLHS is particularly useful for evaluating :
- (A) Economic policies
 - (B) Industrial production
 - (C) Health infrastructure and service utilization
 - (D) Foreign trade
75. Which survey specifically monitors reproductive and child health programme ?
- (A) NSS
 - (B) Census
 - (C) RCH Survey
 - (D) Economic Survey
76. The RCH Survey provides information mainly on :
- (A) Labour force
 - (B) Maternal and child health services
 - (C) Export-import data
 - (D) Industrial production

77. The completeness of registration in CRS is essential for accurate estimation of :
- (A) Industrial growth
 - (B) Fertility and mortality indicators
 - (C) Trade balance
 - (D) Agricultural productivity
78. In SRS, matching of records between continuous enumeration and survey ensures :
- (A) Reduction of sampling error
 - (B) Validation of recorded vital events
 - (C) Reduction of migration bias
 - (D) Elimination of census errors
79. Which of the following is a limitation of sample surveys like NSS and NFHS ?
- (A) Lack of statistical design
 - (B) Non-availability of indicators
 - (C) Sampling and non-sampling errors
 - (D) Lack of questionnaire
80. Population health surveys are usually conducted periodically because :
- (A) Continuous registration is possible
 - (B) They are resource intensive
 - (C) Data are available annually
 - (D) They rely on administrative records
81. Which survey provides large-scale data on anaemia, nutrition, and immunization in India ?
- (A) NFHS
 - (B) NSS
 - (C) Census
 - (D) Economic Survey
82. The dual record system in SRS helps to estimate :
- (A) Migration rates
 - (B) Vital rates with higher reliability
 - (C) Employment rates
 - (D) Agricultural productivity
83. A major strength of NSS surveys is :
- (A) Continuous enumeration
 - (B) National representativeness of sample
 - (C) Legal registration
 - (D) Administrative verification
84. Which of the following surveys is most suitable for analysing maternal health indicators in India ?
- (A) NSS consumption survey
 - (B) Industrial survey
 - (C) Agricultural census
 - (D) NFHS

85. A mortality rate refers to the frequency of :
- (A) Marriages in a population
 - (B) Births in a population
 - (C) Deaths in a population during a specified period
 - (D) Migration in a population
86. Crude Death Rate (CDR) is defined as :
- (A) Total deaths per 1000 mid-year population
 - (B) Infant deaths per 1000 births
 - (C) Deaths per 100 population
 - (D) Deaths per 10,000 births
87. The major limitation of Crude Death Rate is that it :
- (A) Ignores births
 - (B) Does not consider age composition of population
 - (C) Ignores migration
 - (D) Uses census data
88. Standardized Death Rate (SDR) is used to :
- (A) Measure fertility
 - (B) Measure population density
 - (C) Measure migration
 - (D) Remove the effect of age composition when comparing mortality
89. Direct standardization method requires :
- (A) Standard population and age-specific death rates
 - (B) Only total deaths
 - (C) Only birth data
 - (D) Only population projection
90. Indirect standardization method is generally used when :
- (A) Age-specific death rates are available
 - (B) Age-specific death rates are not available
 - (C) Total population is unknown
 - (D) Census data is absent
91. A life table is a statistical model that describes :
- (A) Migration trends
 - (B) Fertility patterns only
 - (C) Survival and mortality pattern of a population
 - (D) Marriage patterns
92. A complete life table usually has age intervals of :
- (A) 10 years
 - (B) 5 years
 - (C) 1 year
 - (D) 2 years

93. An abridged life table generally uses age intervals of :
- (A) 1 year
 - (B) 5 or 10 years
 - (C) 2 years
 - (D) 20 years
94. Life tables are constructed mainly using :
- (A) Agricultural data
 - (B) Vital statistics and census data
 - (C) Industrial surveys
 - (D) Trade statistics
95. One important use of life tables is in :
- (A) Insurance and actuarial calculations
 - (B) Agricultural production
 - (C) Land measurement
 - (D) Weather forecasting
96. The stationary population assumption is important in the construction of :
- (A) Growth curves
 - (B) Life tables
 - (C) Migration tables
 - (D) Income tables
97. Logistic population growth curve is generally :
- (A) Linear
 - (B) Exponential
 - (C) S-shaped (sigmoid)
 - (D) Parabolic
98. The logistic growth model was introduced by :
- (A) Fisher
 - (B) Verhulst
 - (C) Pearson
 - (D) Newton
99. The point where the growth rate of the logistic curve is maximum is called :
- (A) Origin
 - (B) Inflection point
 - (C) Terminal point
 - (D) Equilibrium point
100. Population projection refers to :
- (A) Estimating past population
 - (B) Counting migration only
 - (C) Measuring current population density
 - (D) Estimating future population based on assumptions

(Only for Rough Work)

4. Four alternative answers are mentioned for each question as—A, B, C & D in the booklet. The candidate has to choose the correct answer and mark the same in the OMR Answer-Sheet as per the direction :

Example :

Question :

Q. 1 (A) ● (C) (D)

Q. 2 (A) (B) ● (D)

Q. 3 (A) ● (C) (D)

Illegible answers with cutting and over-writing or half filled circle will be cancelled.

5. Each question carries equal marks. Marks will be awarded according to the number of correct answers you have.
6. All answers are to be given on OMR Answer Sheet only. Answers given anywhere other than the place specified in the answer sheet will not be considered valid.
7. Before writing anything on the OMR Answer Sheet, all the instructions given in it should be read carefully.
8. After the completion of the examination candidates should leave the examination hall only after providing their OMR Answer Sheet to the invigilator. Candidate can carry their Question Booklet.
9. There will be no negative marking.
10. Rough work, if any, should be done on the blank pages provided for the purpose in the booklet.
11. To bring and use of log-book, calculator, pager and cellular phone in examination hall is prohibited.
12. In case of any difference found in English and Hindi version of the question, the English version of the question will be held authentic.

Impt. : On opening the question booklet, first check that all the pages of the question booklet are printed properly. If there is any discrepancy in the question Booklet, then after showing it to the invigilator, get another question Booklet of the same series.

4. प्रश्न-पुस्तिका में प्रत्येक प्रश्न के चार सम्भावित उत्तर—A, B, C एवं D हैं। परीक्षार्थी को उन चारों विकल्पों में से सही उत्तर छाँटना है। उत्तर को OMR आन्सर-शीट में सम्बन्धित प्रश्न संख्या में निम्न प्रकार भरना है :

उदाहरण :

प्रश्न :

प्रश्न 1 (A) ● (C) (D)

प्रश्न 2 (A) (B) ● (D)

प्रश्न 3 (A) ● (C) (D)

अपठनीय उत्तर या ऐसे उत्तर जिन्हें काटा या बदला गया है, या गोले में आधा भरकर दिया गया, उन्हें निरस्त कर दिया जाएगा।

5. प्रत्येक प्रश्न के अंक समान हैं। आपके जितने उत्तर सही होंगे, उन्हीं के अनुसार अंक प्रदान किये जायेंगे।
6. सभी उत्तर केवल ओ. एम. आर. उत्तर-पत्रक (OMR Answer Sheet) पर ही दिये जाने हैं। उत्तर-पत्रक में निर्धारित स्थान के अलावा अन्यत्र कहीं पर दिया गया उत्तर मान्य नहीं होगा।
7. ओ. एम. आर. उत्तर-पत्रक (OMR Answer Sheet) पर कुछ भी लिखने से पूर्व उसमें दिये गये सभी अनुदेशों को सावधानीपूर्वक पढ़ लिया जाये।
8. परीक्षा समाप्ति के उपरान्त परीक्षार्थी कक्ष निरीक्षक को अपनी OMR Answer Sheet उपलब्ध कराने के बाद ही परीक्षा कक्ष से प्रस्थान करें। परीक्षार्थी अपने साथ प्रश्न-पुस्तिका ले जा सकते हैं।
9. निगेटिव मार्किंग नहीं है।
10. कोई भी रफ कार्य, प्रश्न-पुस्तिका के अन्त में, रफ-कार्य के लिए दिए खाली पेज पर ही किया जाना चाहिए।
11. परीक्षा-कक्ष में लॉग-बुक, कैलकुलेटर, पेजर तथा सेल्युलर फोन ले जाना तथा उसका उपयोग करना वर्जित है।
12. प्रश्न के हिन्दी एवं अंग्रेजी रूपान्तरण में भिन्नता होने की दशा में प्रश्न का अंग्रेजी रूपान्तरण ही मान्य होगा।

महत्वपूर्ण : प्रश्नपुस्तिका खोलने पर प्रथमतः जाँच कर देख लें कि प्रश्न-पुस्तिका के सभी पृष्ठ भलीभाँति छपे हुए हैं। यदि प्रश्नपुस्तिका में कोई कमी हो, तो कक्षनिरीक्षक को दिखाकर उसी सिरीज की दूसरी प्रश्न-पुस्तिका प्राप्त कर लें।